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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/980,275 | 05/16/2002 | Masahiro Serizawa | G0126.0213 | 3300 |

32172 7590 07/07/2009

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| EXAMINER |
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WOZNIAK, JAMES S

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| ART UNIT | PAPER NUMBER |
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2626

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| MAIL DATE | DELIVERY MODE |
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07/07/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
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| Office Action Summary | Application No. 09/980,275 | Applicant(s) SERIZAWA ET AL. | |
| | Examiner JAMES S. WOZNAK | Art Unit 2626 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 April 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44, 46-67 and 69-88 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-44, 46-67 and 69-88 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

I. **Claims 1, 16, 22, 28, 34, 51, 57, 74, 79, and 84** are drawn to a speech decoder system, method, or computer readable medium storing a program that decodes a voice-less period by smoothing spectral envelope characteristics. This separate species is defined by the specification as "a first embodiment" (*"spectral envelope characteristics"*, Pages 12-13) and is additionally represented by Fig. 1.

II. **Claims 2, 3, 7, 8, 10, 11, 14, 17, 23, 29, 35, 36, 40, 41, 43, 44, 47, 52, 58, 59, 63, 64, 66, 67, 70, 75, 80, and 85**, are drawn to a speech decoder system, method, or computer readable medium storing a program that decodes a voice-less period by smoothing a feature parameter "based on the parameters and an elapsed time from a time point when a voice period is changed to a voice-less period (Specification, Pages 13-14). This separate species is defined by the specification as "a second embodiment (Pages 12-13) and is additionally represented by Figs. 2-3.

III. **Claims 4, 5, 9, 12, 15, 18, 24, 30, and 76** are drawn to a speech decoder system, method, or computer readable medium storing a program that decodes a voice-less period by

Art Unit: 2626

changing a value of a smoothing coefficient according to received feature parameters and mixing feature parameters received over a period of a plurality of preceding frames (*“device determines coefficients used to mix plural types of signals in the voice-less period according to at least one of the received feature parameters, Specification, Pages 14-15”*). This separate species is defined by the specification as “a fourth embodiment (*Page 14*) and is additionally represented by Figs. 4-5.

IV. Claims 6, 13, 19, 25, 31, 37, 38, 39, 42, 46, 48, 53, 54, 60, 61, 62, 65, 69, 71, 77, 81, 82, 86, and 87 are drawn to a speech decoder system, method, or computer readable medium storing a program that decodes a voice-less period by changing a value of a filter coefficient and/or mixing feature parameters received over a period of a plurality of preceding frames according to a “DTX determination sign” or the claimed “information representing whether a new feature parameter is transmitted or not” (*Specification, Pages 14 and 21*). This separate species is defined by the specification as a “third embodiment (*Page 14*) and is additionally represented by portions of Figs. 2 and 3.

V. Claims 20, 21, 26, 27, 32, 33, 49, 50, 55, 56, 72, 73, 78, 83, and 88 are drawn to a speech decoder system, method, or computer readable medium storing a program that decodes a voice-less period by determining weighting coefficients used in an excitation signal weighted sum operation of a plurality of signals (*“excitation signal composed of plural types of signals”*, *Specification, Page 15*). The separate species is defined by the specification as a “fifth embodiment” and is additionally represented by Figs. 6-7.

Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify

Art Unit: 2626

the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

The claims are deemed to correspond to the species listed above in the following manner:

I- Claims 1, 16, 22, 28, 34, 51, 57, 74, 79, and 84

II- Claims 2, 3, 7, 8, 10, 11, 14, 17, 23, 29, 35, 36, 40, 41, 43, 44, 47, 52, 58, 59, 63, 64, 66, 67, 70, 75, 80, and 85

III- Claims 4, 5, 9, 12, 15, 18, 24, 30, and 76

IV- Claims 6, 13, 19, 25, 31, 37, 38, 39, 42, 46, 48, 53, 54, 60, 61, 62, 65, 69, 71, 77, 81, 82, 86, and 87

V- Claims 20, 21, 26, 27, 32, 33, 49, 50, 55, 56, 72, 73, 78, 83, and 88

The following claim(s) are generic: NONE.

The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons:

The above claims feature separate and different means/steps having different features for accomplishing the decoding of a voice-less period (*see explanation above for how each corresponding decoding is accomplished*).

Art Unit: 2626

2. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James S. Wozniak whose telephone number is (571) 272-7632. The examiner can normally be reached on M-Th, 7:30-5:00, F, 7:30-4, Off Alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached at (571) 272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/James S. Wozniak/
Primary Examiner, Art Unit 2626